MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2015/2016

PPE0035 – PRINCIPLES OF MICROECONOMICS

(Foundation in Management)

15 OCTOBER 2015
9.00 a.m – 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **TWELVE** pages excluding the cover page.
2. Answer **ALL** questions in **Section A** and **B**.
3. The answers for **Section A** should be shaded on the OMR sheet. The answers for **Section B** should be written in the Answer Booklet.

SECTION A: MULTIPLE CHOICE QUESTIONS [50 MARKS]

Instructions: Answer **ALL** questions in this section. Shade the answers on the **OMR** sheet.

1. In the circular flow model, producers _____.
   A. sell goods and services in the factor market
   B. hire resources sold by households in the factor market
   C. and households spend earnings from resource sales on goods and services in the factor market
   D. spend earnings from resource sales on goods and services in the product market

Refer to ***Exhibit 1*** for question no.2. ***Exhibit 1*** shows the production possibilities schedule for the economy of Moribundity.

Guns (hundreds)	1	2	3	4	5
Butter (tonnes)	20	18	15	10	3

Exhibit 1

2. Based on ***Exhibit 1***, if this economy were to produce 3 (hundred) guns and 12 (tonnes) of butter, _____.
   A. it would be on its production-possibilities frontier
   B. it would be utilising its resources with maximum efficiency
   C. it would be operating beyond its production-possibilities frontier
   D. it could utilise resources more efficiently to produce 3 more (tonnes of) butter without sacrificing any guns

3. The owners of the resource _____ are paid _____.
   A. land; wages
   B. labour; profit
   C. capital; interest
   D. entrepreneurship; wages

4. The law of supply states that prices and quantity supplied are _____.
   A. independent
   B. inversely related, ceteris paribus
   C. positively related, ceteris paribus
   D. negatively related, ceteris paribus

5. If people begin to favour romance novels to a greater degree than previously, the demand curve for romance novels _____.
   A. stay constant
   B. shift leftward
   C. shift rightward
   D. both rightward and leftward

Continued...

6. If demand falls by a greater amount than supply falls, then equilibrium price _____ and equilibrium quantity _____.
   A. rises; falls
   B. falls; rises
   C. falls; falls
   D. rises; rises

7. A perfectly vertical demand curve has an elasticity that is _____.
   A. 0
   B. 1.0
   C. negative
   D. greater than 0 but less than 1.0

8. Demand determines price entirely when _____.
   A. supply is perfectly elastic
   B. supply is perfectly inelastic
   C. demand is perfectly inelastic
   D. demand is downward sloping

9. The demand for _____ is more elastic than the demand for _____.
   A. chewing gum; cars
   B. food; exotic vacations
   C. Coca-Cola; all soft beverages
   D. all personal computers; Acer computers

10. If an increase in the price of apples from RM7 to RM9 a bushel, caused by a shift of the demand curve, increase the bushels supplied from 4,000 to 6,000 bushels, _____.
    A. supply is elastic
    B. demand is elastic
    C. supply is inelastic
    D. demand is inelastic

11. If the supply of a good is elastic, it should be noted that when price increases the _____.
    A. supply will increase
    B. quantity supplied will decrease
    C. quantity supplied will increase by a greater percentage than the increase in price
    D. quantity supplied will increase by a smaller percentage than the price increased

12. If good A is a substitute for good B, then the cross elasticity is _____.
    A. 12
    B. zero
    C. infinity
    D. between infinity and zero

Continued...

13. If Jason's income increases by 14 percent and as a result his quantity demanded for DVDs increases by 3 percent, Jason's income elasticity of demand for DVD is _____.
    A. 4.67
    B. 0.21
    C. -4.67
    D. -0.21

14. Last year, Amy bought 45 kilograms of instant noodles when the household income was RM40,000. This year, the household income was only RM30,000 and Amy bought 60 kilograms of instant noodles. All else constant, Amy's income elasticity of demand for instant noodles is obviously _____.
    A. positive. Amy considers instant noodles to be an inferior good
    B. negative. Amy considers instant noodles to be a normal good and a necessity good
    C. negative. Amy considers instant noodles to be an inferior good
    D. none of the above

15. If a consumer receives 20 units of utility from consuming two candy bars, and 25 units of utility from consuming three candy bars, the marginal utility of the second candy bar is _____.
    A. 5 utility units
    B. 25 utility units
    C. 20 utility units
    D. unknown as more information is needed to determine the answer

16. The marginal utility of good A is 6 and the marginal utility of good B is 15. The price of good A is RM2. The price of good B must be _____ if the consumer is maximising her utility.
    A. RM2
    B. RM5
    C. RM10
    D. RM15

17. Which of the following is likely to occur as the result of the law of diminishing marginal utility?
    A. Hudson enjoyed his second slice of pizza more than his first.
    B. Puteri's utility from her second apple was less than her satisfaction from her first orange.
    C. Wesley enjoyed his second bottle of iced tea less than his first bottle, other things constant.
    D. Sally's utility from her first granola bar is greater than Rachel's utility from her second granola bar.

Continued...

18. Why are diamonds more expensive than water?
    A. because water is a necessity
    B. because you get more total utility from diamonds
    C. because the last diamond has higher marginal utility than the last glass of water
    D. because the last glass of water has higher marginal utility than the last diamond

19. As we move downward along a consumer's indifference curve, the consumer's trade-off between two goods _____.
    A. increases and the consumer's utility increases
    B. decreases and the consumer's utility decreases
    C. increases and the consumer's utility remains unchanged
    D. decreases and the consumer's utility remains unchanged

20. The substitution effect of an increase in the price of Raisin Bran refers to _____.
    A. the decrease in the demand for Raisin Bran when its price rises
    B. the fact that the higher price of Raisin Bran lowers consumer's purchasing power, holding money income constant
    C. the result that consumers will now switch to a substitute good such as Cheerios, and the demand curve for Raisin Bran shifts to the left
    D. the fact that the higher price of Raisin Bran relative to its substitutes, such as Cheerios, cause consumers to buy less Raisin Bran

Refer to ***Exhibit 2*** for question no.21.

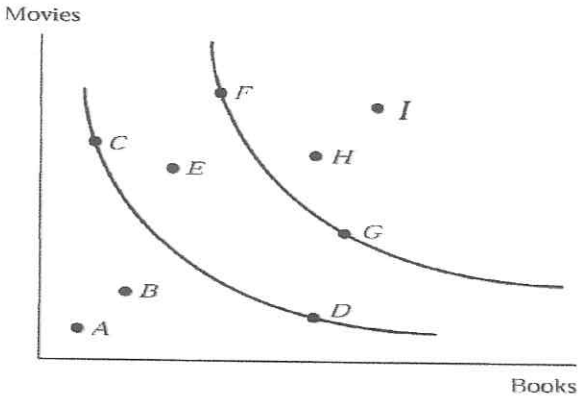

Exhibit 2

21. Which of the following preference rankings is **NOT** consistent with ***Exhibit 2***?
    A. The consumer prefers H to E, which is preferred to G.
    B. The consumer prefers E to C, which is preferred to B.
    C. The consumer is indifferent between F and G, which are preferred to D.
    D. The consumer is indifferent between C and D, which are preferred to A.

Continued...

22. If the price of a product increases, then _____.
    A. the budget line rotates and the optimal quantity demanded, which corresponds to the higher price, decreases
    B. the budget line rotates and the optimal quantity demanded, which corresponds to the higher price, increases
    C. the budget line shifts outward and the optimal quantity demanded, which corresponds to the higher price, decreases
    D. the budget line shifts inward and the optimal quantity demanded, which corresponds to the higher price, increases

23. In the short run, _____.
    A. all inputs are variable
    B. at least one input is fixed
    C. at least two inputs are fixed
    D. all inputs must remain fixed

24. When a firm operating with two inputs, labour and capital, succeeds in increasing the total product by increasing the units of labour employed, the _____.
    A. marginal product of capital is zero
    B. marginal product of labour is positive
    C. the firm is experiencing economies of scale
    D. units of capital employed must also be increasing

25. If the marginal product of the fourth worker is more than the marginal product of the third worker, the firm is experiencing _____.
    A. supernormal profits
    B. increasing marginal returns
    C. diminishing marginal returns
    D. a technological improvement

26. Elvis started a business of producing and selling greeting cards. For this business, which of the following is likely to be a fixed cost?
    A. The costs of paper.
    B. The cost of labour.
    C. The long distance telephone costs.
    D. The six-month rent for the factory.

27. Average fixed costs _____.
    A. behave like variable costs
    B. decline as output increases
    C. behave like marginal costs
    D. behave like average variable costs

28. Average variable costs rise whenever marginal costs _____.
    A. are rising
    B. exceed fixed costs
    C. exceed average total costs
    D. exceed average variable costs

Continued...

29. The marginal cost curve intersects the average variable cost curve and the average total cost curve at _____.
    A. their minimum points
    B. their maximum points
    C. the point where the average fixed cost is at its minimum
    D. the point where average total cost and average variable cost are identical

30. When a firm experiences economies of scale, the LRATC _____.
    A. is vertical
    B. is horizontal
    C. slopes upward
    D. slopes downward

31. Constant returns to scale means that as all inputs are increased, _____.
    A. total output remains constant
    B. average total cost (ATC) rises
    C. average total cost (ATC) rises at the same rate as the inputs
    D. total output increases in the same proportion as all inputs have been increased

32. If a perfect competitive firm selling its product at RM25, then we can conclude that _____.
    A. the average revenue of that firm is RM25
    B. the marginal revenue of that firm is RM25
    C. the market price of that product is RM25
    D. all of the above

33. A perfect competitive firm's marginal cost is the same as the average total cost at the market price. If in the market, price has increased, then _____.
    A. the firm will be shutting down
    B. the firm will be incurring losses
    C. there will be more firms entering the market
    D. both A and B

34. The average variable cost is RM40 for XLY company. XLY company is a perfect competitive firm that sells its product at RM35. Which of the following is **TRUE** about this company?
    A. The total revenue covers part of the total fixed cost in the company.
    B. The total revenue covers all of the total variable cost in the company.
    C. The company should continue to operate because the economic loss is being minimised.
    D. The average variable cost is greater than the average revenue and the company should shut down.

Continued...

35. A firm sold 10 units of output and earned revenue of RM100. Given that the average total cost for this firm is RM15, which of the following is **TRUE**?
    A. Total cost of the firm is RM150.
    B. Total profit of the firm is RM50.
    C. Total variable cost of the firm is RM50.
    D. None of the above.

36. Assume that in a perfectly competitive market, firms find that it is less profitable to sell the products in the market, _____.
    A. the market supply curve shift leftward and the equilibrium price will increase
    B. the market demand curve shift leftward and the equilibrium price will decrease
    C. the market supply curve shift rightward and the equilibrium price will decrease
    D. the market demand curve shift rightward and the equilibrium price will increase

37. William is a hawker selling coconut shake at a night market in Melaka. He sells a cup of coconut shake for RM5, and other hawkers selling the same coconut shake for RM3. If the market for coconut shake is perfectly competitive, what would happen to William's business?
    A. William will lose all his customers.
    B. William will get bundle of profits compare to other hawkers in the market.
    C. All the customers will turn to William because they will think that higher price means higher quality.
    D. Both B and C.

38. Characteristics of a monopoly include _____.
    I. sole seller of its product
    II. product does not have close substitutes
    III. generates large economic profits from economic enterprise
    IV. is located in a small geographic market
    A. both I and II
    B. I, III, and IV
    C. both I and III
    D. all of the above

39. Barriers to entry into the industry arise when _____.
    I. a key resource is owned by a single firm
    II. the government awards a firm the exclusive right to produce a product
    III. a firm produces an output at which P=MC
    IV. a firm faces perfectly elastic demand
    A. I only
    B. I or II only
    C. I, II, or III
    D. all of the above

Continued...

40. A firm is _____ if it is the only seller of its product and if the product has no close substitutes.
    A. an oligopoly
    B. a monopoly
    C. competitive
    D. monopolistically competitive

41. If a monopolist sells 90 units at RM7 per unit and realises an average cost of RM5 per unit, what is the monopolist's profit?
    A. RM800
    B. RM180
    C. RM600
    D. None of the above

42. If a monopolist is at a point on its demand curve such that marginal revenue is less than marginal cost, then it can increase profit by _____.
    A. increasing both price and output
    B. decreasing both price and output
    C. decreasing price and increasing output
    D. increasing price and decreasing output

43. If a monopolist is protected by barriers that prevent other firms from selling the same product, then the monopolist _____.
    A. can always increase profit by raising its price
    B. can charge any price without fear of losing customers
    C. is still constrained by the demand curve for its product
    D. will pass on to its customers any increase in production cost

44. In a small town, Sally's Christmas tree shop has a monopoly on sales of Christmas trees. To increase her sales from 100 trees to 101 trees, she must decrease the price of all trees from RM28 to RM27. Thus, the marginal revenue is _____.
    A. RM26
    B. RM30
    C. –RM73
    D. RM2800

45. The mobile phone market is monopolistically competitive rather than perfectly competitive because _____.
    A. there are many firms in the market
    B. there are many buyers in the market
    C. the firms are price taker in the market
    D. the products are differentiated in the market

Continued...

46. Which of the following is **TRUE** for a firm with a downward-sloping demand curve for its product?
    A. Price, average revenue, and marginal revenue are all equal.
    B. Price, average revenue, and marginal revenue are all different.
    C. Price equals average revenue but is less than marginal revenue.
    D. Price equals average revenue but is greater than marginal revenue.

47. Suppose a monopolistically competitive firm sells 30 units at a price of RM10. Calculate its marginal revenue per unit of output if it sells 10 more units of output when it reduced its price to RM9.
    A. RM4
    B. RM6
    C. RM9
    D. RM300

48. Oligopolies exist and do not attract new competitors because _____.
    A. of competition
    B. of barriers to entry
    C. it is difficult to produce differentiated product
    D. the prices are too low that no competitors are attracted

Refer to ***Exhibit 3*** for questions no. 49 and 50.

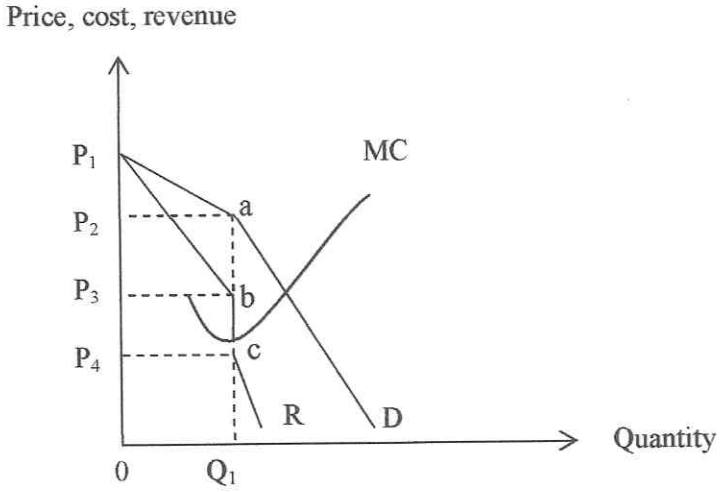

Exhibit 3

49. Based on ***Exhibit 3***, what is the total revenue of the oligopoly firm when it's at the profit maximising level?
    A. P_1P_2a
    B. P_20Q_1a
    C. P_30Q_1b
    D. P_40Q_1c

Continued...

50. Based on ***Exhibit 3***, which of the following is **NOT** true?
    A. The marginal revenue curve which is labelled "cR" associates with the demand curve labelled "aD".
    B. The demand curve which is labelled "P_1a" corresponds with the marginal revenue curve labelled "P_1b".
    C. The demand curve is relatively elastic below P_2 shows that competitors will follow a price reduction.
    D. The demand curve kinked at "a", so the oligopoly firm faces an unusual marginal revenue curve which has a break of "bc".

SECTION B: STRUCTURED QUESTIONS [50 MARKS]

Instructions: Answer **ALL** questions in this section. Write your answers in the Answer Booklet.

Question 1

Part A

Aaron consumes both burger and magazine. ***Exhibit 4*** shows the amount of utility he obtained from the consumption of these two goods respectively.

Burgers		Magazines	
Quantity	Total Utility	Quantity	Total Utility
0	0	0	0
1	56	2	200
2	96	4	360
3	128	6	480

Exhibit 4

Suppose the price of a burger is RM4 per unit, the price of a magazine is RM8 per unit and Aaron has RM40 to spend on burger and magazine.

a) Calculate the marginal utility and marginal utility per price ratio for burger.
(3 marks)

b) Calculate the marginal utility and marginal utility per price ratio for magazine.
(3 marks)

c) What combination of burger and magazine will maximise his utility? Briefly explain how you arrived at the answer.
(2 marks)

Part B

Chris has an income of RM90 per month to allocate between good A and good B. Initially the price of good A is RM6 and the price of good B is RM3.

a) Draw Chris's budget line, and calculate its slope if units of good A are measured on horizontal axis and units of good B on the vertical axis.
(3 marks)

b) Form the equation for Chris's budget line.
(1.5 marks)

Continued...

c) Add an indifference curve to your graph in a) and label the point of consumer equilibrium as E_1. Indicate Chris's optimum consumption level of good A and good B as A_1 and B_1 respectively.

(2 marks)

d) Now suppose the price of good A falls to RM3. Draw Chris's new budget line in the same graph as in a). Label Chris's new point of consumer equilibrium as E_2. Indicate Chris's new optimum consumption level of good A and good B as A_2 and B_2 respectively. Calculate Chris's marginal rate of substitution (MRS) at the new equilibrium point.

(3 marks)

e) Derive demand curve for good A, labelling the different price-quantity combinations determined in c) and d).

(2.5 marks)

[TOTAL 20 MARKS]

Question 2

Part A

Every 31st August, Adidas Malaysia Sdn Bhd prints T-shirts for visitors to the small town of Sik, Kedah. This production process involves both fixed and variable costs. The fixed cost of printing these shirts is RM10. ***Exhibit 5*** describes some of these costs.

Output	Total Variable Cost (RM)	Total Cost (RM)	Average Variable Cost (RM)	Average Total Cost (RM)	Marginal Cost (RM)
0	0	10.00			
1	8.00	18.00			
2		24.00		12.00	
3		28.00			
4		34.00			6.00
5	30.00	40.00	6.40		
6		52.00			10.00
7	54.00	64.00			

Exhibit 5

a) Based on ***Exhibit 5***, complete the table above. Write your answer in the answer booklet.

(6 marks)

b) Sketch a diagram to discuss the relationship between average total cost (ATC) and average variable cost (AVC).

(4 marks)

Continued...

Part B

Sketch a diagram to discuss the relationship between marginal product (MP) and average product (AP).

(5 marks)

[TOTAL 15 MARKS]

Question 3

Suppose Benny sells banana cake in a perfectly competitive market. ***Exhibit 6*** shows Benny's output and cost.

Output	Total cost (RM)
0	8
1	18
2	22
3	30
4	46
5	68
6	95
7	125

Exhibit 6

Based on ***Exhibit 6***,

a) calculate Benny's total revenue if the current equilibrium price for banana cake is RM16.

(4 marks)

b) calculate Benny's marginal revenue and marginal cost.

(3.5 marks)

c) how many banana cakes will Benny produce and what price will he charge in order to maximise his profit? Why?

(1.5 marks)

d) how much profit or loss will he make?

(1 mark)

e) explain what will happen in the long run for this market.

(5 marks)

[TOTAL 15 MARKS]

End of Paper